|   | Index of Claims                             |              |                |          |          |          |   |          |   |                 |                          |          |          | A                      | Application/Control No. |           |           |           |           |              |          |          |          | Applicant(s)/Patent under Reexamination |                     |                |         |              |              |          |                 |           |   |  |
|---|---|--------------|----------------|----------|----------|----------|---|----------|---|-----------------|--------------------------|----------|----------|------------------------|-------------------------|-----------|-----------|-----------|-----------|--------------|----------|----------|----------|---|---------------------|----------------|---------|--------------|--------------|----------|-----------------|-----------|---|--|
|   | 4 19 21 21 21 21 21 21 21 21 21 21 21 21 21 |              |                |          |          |          |   |          |   |                 |                          |          |          | 10/662 077             |                         |           |           |           |           |              |          |          |          |   |                     |                |         |              |              |          |                 |           |   |  |
|   |   |              |                |          |          |          |   |          |   |                 |                          |          |          | 10/663,977<br>Examiner |                         |           |           |           |           |              |          |          |          | TANABE ET AL. Art Unit                  |                     |                |         |              |              |          |                 | _         |   |  |
|   |   |              |                |          |          |          |   |          |   |                 |                          |          |          |                        |                         |           |           |           |           |              |          |          |          |   |                     |                |         |              |              |          |                 |           |   |  |
|   |   |              |                |          |          |          |   |          |   |                 |                          |          |          |                        | Paul B. Yanchus         |           |           |           |           |              |          |          |          | 21                                      | 16                  |                |         |              |              |          |                 | _         |   |  |
|   | <del>[</del>                                |              |                |          |          |          |   |          |   |                 |                          |          |          |                        | ••                      | $\neg$    | Г         | Т         |           |              |          |          |          |   |                     |                |         |              |              |          |                 |           |   |  |
|   |   |              | Rejected       |          |          |          |   | -        | ( | Throu<br>C      | igh numeral)<br>ancelled |          |          | '                      |                         | N         | Non-Elect |           | ted       | .   t        |          | Appeal   |          |   |                     |                |         |              |              |          |                 |           |   |  |
|   |   |              | -              |          |          |          | _ |          |   | $\dashv$        |                          |          |          | -                      |                         |           |           |           | +         | <del> </del> |          |          |          | Α                                       |                     |                |         |              | _            |          |                 |           |   |  |
|   |   |              | =              | Α        | llo      | we       | d |          |   | ÷               | Restricted               |          |          | ł                      |                         |           |           | 1         | Int       | terfe        | eren     | ice      |          | 0                                       |                     | Obj            | ect     | ed           |              |          |                 |           |   |  |
|   |   | Ц            |                |          |          |          |   |          |   |                 |                          |          |          |                        |                         |           | L         |           |           |              |          |          |          | ш                                       |                     |                |         |              |              |          |                 |           |   |  |
|   | Claim                                       |              |                |          | Date     |          |   |          |   |                 | $\Box$                   | Claim    |          |                        |                         | Dat       |           |           | _         | _            |          | ]        | Cla      | aim                                     |                     | _              |         | Dat          | e            |          | _               | $\exists$ |   |  |
|   | a   | Original     | 106            |          |          |          |   |          |   |                 |                          | <u></u>  | nal      |                        |                         |           |           |           |           |              |          |          | al       | inal                                    |                     |                |         |              |              |          |                 | -         |   |  |
|   | Final                                       | Origi        | T              |          |          |          |   |          |   |                 |                          | Final    | Original |                        |                         |           |           |           |           | ŀ            |          |          | Final    | Original                                |                     |                |         |              |              |          |                 | ı         |   |  |
|   |   | 0            | . 2            | $\vdash$ | $\dashv$ | $\dashv$ | _ | Н        |   | $\dashv$        | $\dashv$                 |          | 51       | $\left  \cdot \right $ | $\dashv$                | $\dashv$  | $\dashv$  | $\dashv$  | $\dashv$  | +            |          | -        |          | 101                                     | $\vdash \vdash$     | +              | +       | ╀            | ╁            | Н        | +               | ᅱ         |   |  |
|   |   | 2            | Ĭ              |          |          |          |   |          |   |                 | $\exists$                |          | 52       |                        |                         | $\exists$ | $\dashv$  |           |           | 士            |          | 1        |          | 102                                     |                     |                | 上       |              |              |          |                 | ╛         |   |  |
|   |   | 3            | $\parallel$    |          |          |          |   |          |   | $\dashv$        | 4                        |          | 53<br>54 | Н                      |                         | _         | 4         | 4         | $\dashv$  | 1            | $\perp$  | -        |          | 103                                     | $\sqcup$            | -              | +       | ╀            | -            |          | $\perp$         | 4         |   |  |
|   |   | <b>(4)</b> 5 | H              |          | $\dashv$ | $\dashv$ |   | H        |   | $\dashv$        | $\dashv$                 | $\vdash$ | 55       | Н                      | $\dashv$                | $\dashv$  | +         | +         | $\dashv$  | +            | +        | ┨        |          | 104<br>105                              | H                   | +              | +       | ╁            | ╁            | Н        | $\dashv$        | ᅱ         |   |  |
|   |   | 6            |                |          |          |          |   |          |   |                 | $\exists$                |          | 56       |                        |                         | $\Box$    |           |           |           | 1            |          | 1        |          | 106                                     |                     | 1              |         |              |              |          |                 |           |   |  |
|   |   | 7<br>8       | 1              |          |          | $\dashv$ |   |          |   | -               | -                        | -        | 57<br>58 | $\vdash$               | -                       | $\dashv$  | -         | $\dashv$  | +         | +            | +        | ┨        |          | 107<br>108                              | $\vdash$            | +              | +       | +-           | ╁            |          | $\dashv$        | $\dashv$  |   |  |
| • |   | 9            |                | 1        |          |          |   |          |   |                 | $\exists$                |          | 59       |                        |                         |           |           | $\exists$ | #         | $\perp$      |          | 5        |          | 109                                     |                     |                |         |              |              |          |                 | ╛         |   |  |
|   |   | 10           |                |          |          | _        |   |          |   | $\Box$          | $\Box$                   |          | 60       |                        | _                       | _         | $\dashv$  | _         |           | _            | _        | 4        |          | 110                                     |                     | _              | _       | -            | ╄            |          |                 | 4         |   |  |
|   |   | 11<br>12     | -              |          | H        | $\dashv$ |   | H        |   | $\vdash$        | $\dashv$                 | $\vdash$ | 61<br>62 | H                      | $\dashv$                | $\dashv$  | $\dashv$  | +         | $\dashv$  | $\dashv$     | +-       | +        |          | 111<br>112                              | $\vdash$            | +              | +       | ╁╌           | ╁            |          |                 | ᅱ         |   |  |
|   |   | 13           |                |          |          |          |   |          |   |                 | コ                        |          | 63       |                        | $\Box$                  |           |           |           |           | 1            |          | ]        |          | 113                                     |                     |                |         | ļ            | _            |          |                 | $\exists$ |   |  |
|   |   | 14<br>15     | H              |          |          |          |   |          |   | $\vdash$        | $\dashv$                 | $\vdash$ | 64<br>65 | $\vdash$               | -                       | -         | +         | +         | $\dashv$  | +            | +        | -        |          | 114<br>115                              | $\vdash$            | ╁              |         | ╁            | 1            | $\vdash$ | $\dashv$        | $\dashv$  |   |  |
|   |   | 16           |                |          |          |          |   |          |   |                 |                          |          | 66       |                        |                         |           |           | T         | 1         |              |          | 1        |          | 116                                     |                     |                | 士       |              |              |          |                 | ╛         |   |  |
|   |   | 17           | ļ <sup>.</sup> |          |          |          |   |          |   | -               | -                        | $\vdash$ | 67<br>68 | $\sqcup$               | 4                       | _         | -         | 4         | $\dashv$  | +            | +        | -        |          | 117<br>118                              |                     | +              | +       | -            | Ì            | Н        | -               | ᆛ         |   |  |
|   |   | 18<br>19     | ┢              |          | Н        |          | - | H        | - | $\vdash$        | $\dashv$                 |          | 69       | $\vdash$               | -                       | -         | $\dashv$  | $\dashv$  | $\dashv$  | +            | ╁        | 1        |          | 119                                     | -                   | +              | +       | +            | 1            | Н        | $\dashv$        | ┪         |   |  |
|   |   | 20           |                |          |          |          |   |          |   | $\Box$          |                          |          | 70       |                        |                         |           |           | 1         | 4         | $\Box$       |          | ]        |          | 120                                     | П                   | $\blacksquare$ | $\perp$ | lacksquare   | -            |          |                 | $\Box$    |   |  |
|   |   | 21<br>22     | ╁              |          |          |          |   |          |   | H               | $\dashv$                 |          | 71<br>72 | Н                      |                         | $\dashv$  | $\dashv$  | $\dashv$  | +         | +            | +        | -        |          | 121<br>122                              | $\vdash$            | $\dashv$       | ╁       | +            | ╁╴           |          | $\dashv$        | ᅱ         |   |  |
|   |   | 23           |                |          |          |          |   |          |   |                 | $\Box$                   |          | 73       |                        |                         |           | ╛         | 1         |           |              | 丰        | ]        |          | 123                                     |                     |                |         |              |              |          |                 |           | • |  |
|   |   | 24<br>25     | H              | $\vdash$ | _        |          | _ |          | _ | $\vdash \vdash$ | $\dashv$                 |          | 74<br>75 | -                      |                         | ᅱ         | $\dashv$  | +         |           | +            | +        | ┨╏       |          | 124<br>125                              | $\vdash$            | _              | +       | +-           | ╁            | Н        | $\dashv$        | -         |   |  |
|   |   | 26           |                |          |          |          |   |          |   |                 | $\exists$                |          | 76       |                        |                         |           |           |           | $\exists$ |              |          | _        |          | 126                                     |                     |                | 1       |              |              |          |                 |           |   |  |
|   |   | 27           | _              |          |          |          |   |          |   |                 | 4                        |          | 77<br>78 |                        | _                       |           | 4         | 4         | 4         | +            | +        | 4        |          | 127<br>128                              | $\sqcup$            |                | +       | +            | ╀            |          | $\dashv$        | _         |   |  |
|   |   | 28<br>29     | $\vdash$       | $\vdash$ |          |          |   |          |   | H               | $\dashv$                 | -        | 79       | Н                      | $\dashv$                | -         | ᅥ         | +         | +         | $\dashv$     | +        | 1        |          | 129                                     | H                   | _              | +       | ╁            | ╁            | Н        | $\dashv$        | ᅱ         |   |  |
|   |   | 30           |                |          |          |          |   |          |   |                 | $\Box$                   |          | 80       |                        |                         |           | $\Box$    |           | $\Box$    |              | Ţ        | ]        |          | 130                                     | П                   |                | $\bot$  | I            |              |          |                 |           |   |  |
|   |   | 31<br>32     | $\vdash$       |          |          |          |   | H        | _ | H               | $\dashv$                 | -        | 81       |                        |                         | $\dashv$  | $\dashv$  | $\dashv$  | $\dashv$  | $\dashv$     | +        | +        |          | 131<br>132                              | $\vdash$            | +              | +       | +            | ╁            | $\vdash$ | $\vdash$        | _         |   |  |
|   |   | 33           |                |          |          |          |   |          |   |                 | コ                        |          | 83       |                        |                         |           |           |           |           |              |          | 1        |          | 133                                     |                     |                |         |              |              |          |                 |           |   |  |
| : |   | 34<br>35     | L              |          |          |          |   | $\perp$  |   | $\sqcup$        | $\dashv$                 | -        | 84       | $\vdash$               | $\dashv$                | $\dashv$  | $\dashv$  | 4         | -         | $\dashv$     | +        | -        |          | 134<br>135                              | $\vdash$            | +              |         | ╀            | ╀            | -        |                 | _         |   |  |
|   |   | 36           | ┢              |          | Н        | H        |   | $\vdash$ | H | $\vdash$        | $\dashv$                 | -        | 86       | H                      | $\dashv$                | $\dashv$  | $\dashv$  | $\dashv$  | +         | $\dashv$     | $\dashv$ | ┥╽       |          | 136                                     | H                   | +              | +       | ╁            | ╁            | Н        | $\dashv$        | ᅥ         |   |  |
|   |   | 37           |                |          |          |          |   |          |   |                 | $\Box$                   |          | 87       |                        |                         |           | $\Box$    | 4         | $\dashv$  | 1            |          | ]        |          | 137                                     | П                   | $\perp$        |         | $oxed{\Box}$ | $oxed{\Box}$ |          | $\Box$          |           |   |  |
|   |   | 38<br>39     | $\vdash$       | $\vdash$ | Н        | $\dashv$ |   | -        | - | $\vdash$        | $\dashv$                 | -        | 88<br>89 | Н                      | $\dashv$                | $\dashv$  | $\dashv$  | $\dashv$  | $\dashv$  | ╬            | - -      | ┤╵       |          | 138<br>139                              | H                   | +              | +       | ╁╌           | ╁            | Н        | $\dashv$        |           |   |  |
|   |   | 40           |                |          |          |          |   |          |   |                 | $\exists$                |          | 90       |                        |                         |           |           | $\exists$ | 寸         | $\perp$      | 土        | ]        |          | 140                                     |                     | 士              | 1       | 上            |              |          |                 |           |   |  |
|   |   | 41<br>42     | $\vdash$       | H        |          |          |   |          |   | ert             | $\dashv$                 |          | 91<br>92 | $\vdash \downarrow$    |                         | _         | -         | 4         | $\dashv$  | +            | +        | -        |          | 141<br>142                              | $\vdash \downarrow$ | +              | +       | +            | +-           | H        | $\vdash \mid$   | $\dashv$  |   |  |
|   |   | 42           | +-             | $\vdash$ | $\vdash$ | $\vdash$ |   |          | - | H               | $\dashv$                 |          | 93       | $\vdash$               |                         |           | _         | _         | $\dashv$  | +            | $\pm$    | 1        |          | 143                                     |                     | $\pm$          | 1       | 1            | $\perp$      |          |                 | $\exists$ |   |  |
|   |   | 44           | L              |          | П        |          |   |          | _ | П               | $\Box$                   |          | 94       | П                      |                         |           | $\dashv$  | 7         |           | 1            |          | ]        |          | 144                                     | П                   | $\bot$         |         | F            | F            |          | $\Box$          | $\Box$    |   |  |
|   |   | 45<br>46     | $\vdash$       |          | $\vdash$ | $\dashv$ | - | -        |   | Н               | $\dashv$                 | -        | 95<br>96 | H                      |                         |           | $\dashv$  | $\dashv$  | $\dashv$  | +            | +        | $\dashv$ |          | 145<br>146                              |                     | +              | +       | +-           | +            | +-       | +               | $\dashv$  |   |  |
|   |   | 47           |                | Ц        |          |          |   |          |   | Ц               | $\exists$                |          | 97       |                        |                         |           |           | $\Box$    | $\dashv$  | $\downarrow$ | 工        | ]        |          | 147                                     |                     | $\Box$         | #       | T            | 1            |          |                 | $\Box$    |   |  |
|   | -   | 48<br>49     | +              | Н        | Н        | $\vdash$ | - | $\vdash$ | _ | $\vdash \vdash$ | $\dashv$                 | -        | 98<br>99 | Н                      | $\dashv$                |           | +         | +         | $\dashv$  | +            | +        | $\dashv$ | <u> </u> | 148<br>149                              | $\vdash \vdash$     | +              | +-      | +            | ╁            | $\vdash$ | $\vdash \vdash$ | $\dashv$  |   |  |
|   |   | 50           |                |          |          |          |   |          |   |                 | $\exists$                |          | 100      |                        |                         |           |           |           |           |              |          | _        |          | 150                                     |                     | $\pm$          | 土       |              | L            |          |                 |           |   |  |